

IN THE CLAIMS:

Please amend the claims as follows:

- 1 1. (Currently Amended) In a machine vision system having a plurality of distinct vision
2 processors (VPs), each VP being on a respective VP computing platform, and at least one distinct
3 machine vision user interface (UI), the at least one distinct machine vision UI being on a
4 respective distinct machine vision UI computing platform, a method for instructing a machine
5 vision UI in communication with a first distinct VP to establish communication with a second
6 distinct VP, the method comprising:
- 7 providing a first distinct VP with a link function, the first distinct VP being on a first
8 respective distinct VP computing platform connected to a network, the link function being a
9 control function executable by the first distinct VP,
- 10 the link function being both for enabling a user to configure any second distinct VP
11 connected to the network using the at least one distinct machine vision UI on a respective distinct
12 machine vision UI computing platform connected to the network, and for establishing
13 communication via the network between the any second distinct VP of the plurality of VPs and
14 the at least one distinct machine vision UI on the respective distinct machine vision UI
15 computing platform, the any second distinct VP being on a second respective distinct VP
16 computing platform,
- 17 the communication via the network established by the link function enabling a
18 continually updated image display on the at least one distinct machine vision UI representing a
19 current state of the any second distinct VP connected to the network; and

20 executing the link function so as to issue instructions via the network from the first
21 distinct VP to the distinct machine vision UI to establish communication via the network with the
22 any second distinct VP.

1 2. (Previously Presented) The method of claim 1, wherein the link function includes:
2 a VP control function having a plurality of parameters, including at least an identifier of
3 the second VP.

1 3. (Previously Presented) The method of claim 1, wherein executing the link function
2 includes:
3 clicking on a graphical representation of the link function displayed by the machine
4 vision UI.

1 4. (Previously Presented) The method of claim 3, wherein the graphical representation of
2 the link function is an underlined text string displayed by the machine vision UI.

1 5. (Previously Presented) The method of claim 1, wherein instructions from the first VP to
2 the machine vision UI includes:
3 a plurality of parameters, including at least an identifier of the second VP, and at least one
4 of a description of a view of the second VP, and a cursor position of the second VP.

1 6. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by a user.

1 7. (Previously Presented) The method of claim 6, wherein executing the link function is
2 initiated by a user via the at least one machine vision UI.

1 8. (Previously Presented) The method of claim 7, wherein the at least one machine vision
2 UI includes a check box.

1 9. (Previously Presented) The method of claim 7, wherein the at least one machine vision
2 UI includes a radio button.

1 10. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by an external event.

1 11. (Original) The method of claim 10, wherein the external event is an industrial process
2 event.

1 12. (Previously Presented) The method of claim 10, wherein the external event is a change in
2 the state of a sensor.

1 13. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by a programmatic decision.

1 14. (Previously Presented) The method of claim 1, wherein executing the link function is
2 initiated by a human decision.

1 15. (Previously Presented) The method of claim 1, wherein executing the link function
2 includes:

3 including the link function in a function execution sequence of the VP.

4 16. (Previously Presented) The method of claim 1, wherein the link function also terminates
5 communication with the first VP in addition to establishing communication with the second VP.

1 17. (Previously Presented): The method of claim 1, wherein the link function enables local
2 dynamic display of images provided by a camera of the second VP on the at least one machine
3 vision UI.

1 18. (Canceled)

1 19. (Canceled)

1 20. (Currently Amended) In a machine vision system having a plurality of distinct vision
2 processors (VPs), each VP being on a respective distinct VP computing platform and at least one
3 distinct machine vision user interface (UI), the at least one distinct machine vision UI being on a
4 respective distinct machine vision UI computing platform, a method for instructing a machine
5 vision UI in communication with a first distinct VP to establish communication with a second
6 distinct VP, the method comprising:

7 providing a graphical representation, included in the at least one distinct machine vision
8 UI, the graphical representation being adapted to respond to user action so as to cause the first
9 distinct VP on a first respective distinct VP computing platform connected to a network to
10 instruct the at least one distinct machine vision UI on a respective distinct machine vision UI
11 computing platform connected to the network to establish communication via the network with
12 any second distinct VP on a second respective distinct VP computing platform connected to the
13 network,

14 the communication via the network enabling a continually updated image display on the
15 at least one distinct machine vision UI representing a current state of the any second distinct VP,
16 and enabling a user to configure the any second distinct VP using the distinct machine vision UI.

1 21. (Canceled)

1 22. (Previously Presented) The machine vision system of claim 20, wherein the network
2 supports a TCP/IP network protocol.

1 23. (Previously Presented) The machine vision system of claim 20, wherein the user action
2 includes selecting the graphical representation.

1 24. (Previously Presented) The machine vision system of claim 20, wherein the user action is
2 a mouse click upon the graphical representation.

1 25. (Original) The machine vision system of claim 20, wherein the graphical representation
2 is an underlined text string.

1 26. (Currently Amended) A user interface (UI) for a machine vision system having a
2 plurality of distinct vision processors (VPs) including a first distinct VP on a first respective
3 distinct VP computing platform, and a second distinct VP on a second respective distinct VP
4 computing platform, the user interface comprising:
5 a spread sheet; and
6 a graphical representation, the graphical representation being incorporated in the
7 spreadsheet, the graphical representation being adapted to respond to user action so as to cause a
8 first distinct VP on a first respective distinct VP computing platform to instruct the UI to
9 establish communication via a network with any second distinct VP of the plurality of VPs on a
10 second respective distinct VP computing platform, the communication via the network enabling
11 a continually updated image display on the UI representing a current state of the any second
12 distinct VP, and enabling a user to configure the any second distinct VP using the at least one UI.

1 27. (Previously Presented) The user interface (UI) of claim 26, wherein the graphical
2 representation is further adapted to respond to user action so as to cause the UI to terminate
3 communication with the first VP of the plurality of VP.

1 28. (Original) The user interface (UI) of claim 26, wherein the graphical representation is an
2 underlined text string.

1 29. (Original) The user interface (UI) of claim 26, wherein the graphical representation is an
2 ionic representation

1 30. (Currently Amended) A machine vision system comprising:
2 a plurality of distinct vision processors (VPs), each VP being on a respective distinct VP
3 computing platform connected to a network;
4 at least one distinct machine vision user interface (UI), the at least one distinct machine
5 vision user interface (UI) being on a respective distinct machine vision UI computing platform
6 connected to the network, the machine vision UI being in communication via the network with a
7 first distinct VP of the plurality of VPs on a first respective distinct computing platform, the
8 machine vision UI including:
9 a graphical representation visible to a user, the graphical representation being adapted to
10 respond to user action so as to cause the first distinct VP to instruct the distinct machine vision
11 UI to establish communication via the network with any second distinct VP of the plurality of
12 VPs on a second respective distinct computing platform, the communication via the network
13 enabling a continually updated image display on the distinct machine vision UI representing a

14 current state of the any second VP, and enabling a user to configure via the network the any
15 second distinct VP using the distinct machine vision UI.

1 31. (Canceled)

1 32. (Previously Presented) The machine vision system of claim 30, wherein the network
2 supports a TCP/IP network protocol.

1 33. (Original) The machine vision system of claim 30, wherein user action is a mouse click
2 upon the graphical representation.

1 34. (Original) The machine vision system of claim 30, wherein the graphical representation
2 is an underlined text string.